

## REMARKS

Reconsideration of the application is respectfully requested. The following remarks correspond to like paragraph numbers in the Detailed Action provided by the Examiner.

1. Claim 9 has been amended to depend from claim 8, not from itself.
2. Examiner has rejected claims 1 and 19 as being indefinite. In particular, it is stated that claims 1 and 19 do not provide proper "means plus function" elements.

With respect, each of the "means plus function" elements of claims 1 and 19 properly recite a function. Claim 1 includes means for each of the following functions:

- monitoring and collecting aircraft data;
- formatting the data or a portion of the data as a binary or text file;
- incorporating the binary or text file into an email message;
- transmitting the email; and
- communication means

35 USC 112, 6<sup>th</sup> paragraph specifically permits recitation of means to perform a specified function, without recitation of the underlying structure or material. In the present case, each of the elements referred to by the Examiner is a specified function. "Monitoring and collecting" data is a function, as is "formatting" the data. Each of the specified functions expressed in the claim elements falls within the permissible bounds of 35 USC 112, 6<sup>th</sup> paragraph

As stated in MPEP 2173.05(g) Functional Limitations [R-3]

"A functional limitation is an attempt to define something by what it does, rather than by what it is (e.g., as evidenced by its specific structure or specific ingredients). There is nothing inherently wrong with defining some part of an invention in functional terms. Functional language does not, in and of itself, render a claim improper. *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971).

A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. A functional limitation is often used in association with an element, ingredient, or step of a process to define a particular capability or purpose that is served by the recited element, ingredient or step."

Each of the words "monitoring", "formatting", "implementing" defines the element by what it does, and is therefore permissible and correct use of the "means plus function" format.

3. Examiner has rejected claims 1-6, 8, 10-15 and 17-20 as being anticipated under 35 USC 102(b) by the Bateman reference.

With respect, it is submitted that a clear distinction may be made between the rejected claims and the teachings of Bateman. Claim 1 clearly specifies that the data is formatted into a binary or text file. Claim 11 has been amended to specify that the summary data file is in binary or text format. Binary and text files are specific types of digital files. A binary file is one that records data in binary format, while a text file is one that stores simple text, typically in ASCII or Unicode formats.

Bateman does not teach the use of binary or text files. Bateman simply refers to digital files generally, and includes such digital files as audio, image and video files (see column 8, line 57 to column 9, line 26). The difference may be seen in that Bateman requires compression of its data streams (see column 10, lines 14-17) because of the size of the digital files contemplated. The amount of data contemplated by Bateman requires that data transmission be continuous. This difference is emphasized in the different objects of the respective inventions. In Bateman, the focus is on accident analysis, where all data is potentially relevant (see Background section). In the present invention, all data is not important as the focus is on operational efficiency (see Background section).

In the present invention, the use of binary or text files allows data to be efficiently formatted in a small package, which facilitates the periodic or occasional transmission of the data by e-mail.

As is well known to those skilled in the art, an email message comprises a text file, therefore appending or including data in binary or text format is simple and efficient. There is no description or suggestion in the Bateman reference which leads one skilled in the art to the use of binary or text files in the manner claimed.

The difference between the Bateman system and the present invention is significant. In Bateman, a great deal of raw data is transmitted continuously (see column 11, line 58):

Data is continuously transmitted to the ground receiving stations via a cellular phone modem 222 and/or a telemetry modem 224 that processes data directly...

Because of the volume of data, Bateman recognizes that the data should be compressed. In contrast, in the present invention, flight data is distilled and formatted as small binary or text files (less than 1 kb) and transmitted **periodically or occasionally**, as events warrant. The periodic nature of transmission is inherent in the use of email to carry the data. It is therefore a more efficient method of messaging flight data. Rather than a continuous stream of compressed raw data, a small file of relevant data is transmitted only when necessary.

Therefore, claims 1 and 11 are submitted to be novel and inventive. Claims 2-10 depend from claim 1 and claims 12-18 depend from claim 11 and are therefore also submitted to be novel and inventive. Claims 19-20 have been cancelled.

New claims 21 and 22 depend from claim 11.

New claims 22 and 23 are also submitted to be novel and inventive. In the Bateman reference, data recordation and transmission is a continuous process. All data is recorded and then monitored for changes or threshold levels. However, in the present invention, during monitoring mode, data is compared to a rules database **without being stored or recorded**. This is a significant difference as significantly fewer resources are required as data storage or recordation does not occur until the happening of a specified event.

Furthermore, it is apparent in Bateman that data monitoring is not of the data itself, but rather the volume of data being streamed or transmitted:

"A 'changing data' system (70) that monitors data as it is recorded and responds to changes in data above a predetermined threshold level [column 8, lines 40-43]... If a data stream is suddenly increased or decreased by the fact that one or more of the FERS cameras or sensors has sent an increased or decreased amount of data not considered to be a normal flow of data from that particular source or sensor, the FERMONT unit (10) will react to being recording pertinent data and/or images"

In contrast, in the present invention, the data itself is being compared to the rules database, not the volume of data as described in the Bateman reference.

### CONCLUSION

In view of the foregoing remarks and amendments, it is respectfully submitted that this application is in condition for allowance and allowance thereof is respectfully requested.

Respectfully submitted,

Kurt Kolb, et al.

By: 

Edward Yoo (Reg. No. 41,435)

CORRESPONDENCE ADDRESS CUSTOMER NO. 22828